

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-16. (Canceled)

17. (Previously presented) A corrosion resistant member comprising a Y_2O_3 sintered material that includes 99.9% by weight or more Y in terms of Y_2O_3 , wherein

said Y_2O_3 sintered material comprises at least metal element of AE, wherein AE is a group II element of the periodic table, and

wherein a difference in crystal grain size between the surface and the inside region of said Y_2O_3 sintered material is not larger than 30 μm .

18. (Previously presented) The corrosion resistant member according to claim 17, wherein said Y_2O_3 sintered material further comprises any one of Si, Fe and Al.

19. (Currently amended) The corrosion resistant member according to claim 17, wherein said Y_2O_3 sintered material ~~further comprises any of a group of metallic elements consisting of~~ Si, Fe, Al and AE (these metallic elements will hereinafter be collectively referred to as metal elements M), in concentrations of 300 ppm or less for Si in terms of SiO_2 , 50 ppm or less for Fe in terms of Fe_2O_3 , 100 ppm or less Al in terms of Al_2O_3 and 350 ppm or less AE, wherein AE is a group II element of the periodic table, in terms of AEO, wherein AEO is a compound containing the AE and O.

20. (Previously presented) The corrosion resistant member according to claim 19, wherein the content ratio of any of the metal elements M contained at and near the surface to that contained deep inside of said Y_2O_3 sintered material is in a range from 0.2 to 5.

21. (Previously presented) The corrosion resistant member according to claim 17, wherein said Y_2O_3 sintered material shows dielectric loss tangent of 2×10^{-3} or less in a frequency range from 10 MHz to 5 GHz.

22. (Currently amended) The corrosion resistant member according to claim 17, ~~wherein the~~ having a carbon content in said Y_2O_3 sintered material that is 100 ppm by weight or less.

23. (Previously presented) The corrosion resistant member according to claim 17, wherein said Y_2O_3 sintered material has void ratio of 5% or less.

24. (Previously presented) The corrosion resistant member according to claim 17, wherein said Y_2O_3 sintered material has density of 4.8 g/cm^3 or higher.

25-27. (Canceled)